



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

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COMMONWEALTH OF VIRGINIA Department of Environmental Quality Piedmont Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

DuPont Teijin Films™
5401 Jefferson Davis Highway; Chesterfield County, Virginia
Permit No. PRO51924

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, DuPont Teijin Films™ has applied for a Title V Operating Permit for its film coating facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: _____
Sherry Tostenson
(804) 527-5097

Date: _____

Air Permit Manager: _____
James E. Kyle, P.E.

Date: _____

Deputy Regional Director: _____
Kyle Ivar Winter, P.E.

Date: _____

FACILITY INFORMATION

Permittee/Facility

DuPont Teijin Films™
P.O. Box 27222
5401 Jefferson Davis Highway
Richmond, Virginia 23261

County-Plant Identification Number: 041-0418

SOURCE DESCRIPTION

NAICS Code: 326112 – Plastics Packaging Materials and Unlaminated Film and Sheet Manufacturing

DuPont Teijin Films™ coats plastic film with a variety of coatings. The coating process involves affixing a thin, uniform coating to the surface of the film. The process is organized in the following areas: solution prep, coating and drying, and solvent recovery.

This facility was previously considered to be part of the larger DuPont Spruance Plant (Registration #50397), but when the film portion of the facility was sold to DuPont Teijin Films™, VA DEQ determined that the film facility was no longer under common control with the rest of the Spruance Plant. Therefore, VA DEQ issued the film facility its own registration number (51924) and now considers the film facility to constitute its own stationary source.

The facility is a Title V major source of more than 10 tons/yr of a single federal HAP, toluene, and more than 100 tons/yr of VOC. This source is located in an attainment area for all pollutants. The facility was previously permitted under a NSR Permit issued on June 9, 2011.

Since the original Title V was issued on January 9, 2002 and the renewal issued on September 1, 2006, there have been no significant amendments/ modifications.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

| Emission Unit No. | Stack Nos. /Control Equipment | Emission Unit Description | Size/Rated Capacity* | Applicable Permit Date |
|---------------------------|------------------------------------|--|--|------------------------|
| Mylar® Solution Prep Area | | | 3.6 tons/hr coating solution for the Mylar® Solution Prep Area | |
| MYE01 | MYS01-08 (Carbon Bed Adsorbers) | Z Side Weigh Tanks | | 6/9/11 |
| | MYS09-12 (Mixing Room Vents) | | | |
| MYE02-03 | MYS01-08 (Carbon Bed Adsorbers) | Two (2) Z Side Dissolvers | | 6/9/11 |
| | MYS09-12 (Mixing Room Vents) | | | |
| MYE04-05 | MYS01-08 (Carbon Bed Adsorbers) | Two (2) Z Side Mixer/Blenders | | 6/9/11 |
| | MYS09-12 (Mixing Room Vents) | | | |
| MYE06-09 | MYS01-08 (Carbon Bed Adsorbers) | Four (4) Mix Tanks (MYE06-09 – 2,800 gallon capacity - each) (maximum rated capacity, 3,000 lbs/hr each) | | 6/9/11 |
| | MYS09-12 (Mixing Room Vents) | | | |
| MYE10-11 | MYS01-08 (Carbon Bed Adsorbers) | Two (2) Dissolver Tanks | | 6/9/11 |
| | MYS09-12 (Mixing Room Vents) | | | |
| MYE12-19 | MYS01-08 (Carbon Bed Adsorbers) | Eight (8) Blenders/Hold Tanks | | 6/9/11 |
| | MYS09-12 (Mixing Room Vents) | | | |

| Emission Unit No. | Stack Nos. /Control Equipment | Emission Unit Description | Size/Rated Capacity* | Applicable Permit Date |
|---|---|--|--|------------------------|
| | | | | |
| | | Vertical Coaters (G, H, I & J) & Multi-station coater combined | 3.3 tons/hr coated Mylar® film product for vertical coaters (G, H, I & J) & multi-station coater combined. | |
| Vertical Coaters (G, H, I & J) | | | | |
| MYE20-23 | MYS13-14 (Coating Room Vents) | Four (4) Vertical Coating Drying Lines | Vertical tower coater “G”): 0.5856 tons/hr coated Mylar® film product | 6/9/11 |
| | MYS01-08 (Carbon Bed Adsorbers) | | Vertical tower coaters “H, I, and J”): 1.017 tons/hr (combined) coated Mylar® film product | |
| | | | | |
| R1 Process (Horizontal coater or multi-station coater) | | | | |
| MYE24 | MYS15 (R1 Room Vent/Exhaust Fan) | One (1) Three-Station Horizontal Coating / Drying Line | Multi-station coater: 1.636 tons/hr coated Mylar® film product. | 6/9/11 |
| | MYS01-08 (Carbon Bed Adsorbers) | | | |
| MYE25 | MYS16-18 (Small Lots Tank Vents (3)) | Small Lot Tanks | Each tank <2,000 gallons | 6/9/11 |
| | MYS01-08 (during fill only) | | | |
| | | | | |
| Recovery | | | | |
| MYE 26 | MYS19 (Recovery Building Vent/Exhaust Fan) | Solvent Recovery Building | 1.5 tons/hr THF/toluene | 6/9/11 |

| Emission Unit No. | Stack Nos. /Control Equipment | Emission Unit Description | Size/Rated Capacity* | Applicable Permit Date |
|---------------------|---|--|--|------------------------|
| MYT06 | MYS01-08 (Carbon Bed Adsorbers) | Miscellaneous Storage Tanks | 20 tanks - each less than 19,815 gallon capacity with a total capacity of 37,285 gallons. (The capacity of each of the tanks are also below 2,000 gallon capacity or the vapor pressure of the material stored is less than or equal to 1.5 psia.) | 6/9/11 |
| MYT09 | MYS01-08 (Carbon Bed Adsorbers) | #3 Secondary containment tank, could contain THF | 4,500 gallons (Material stored is greater than 1.5 psia.) | 6/9/11 |
| MYE27 | MYS20 (Tank Truck Loading Vent) | Tank Truck Loading Station | 150 gpm pump | NA |
| NA | MYS21 | Various Emergency Vents | | NA |
| Bulk Storage | | | | |
| MYT04 | MYS19 (Recovery Building Vent/Exhaust Fan) | One (1) Crude Toluene Storage Tank | 4,700 gallons (Material stored is less than 1.5 psia) | 6/9/11 |
| | MYS01-08 (Carbon Bed Adsorbers) | | | |
| MYT07 | MYS01-08 (Carbon Bed Adsorbers) | One (1) Toluene Storage Tank | 13,000 gallons (Material stored is less than 1.5 psia.) | 6/9/11 |
| MYT08 | MYS01-08 (Carbon Bed Adsorbers) | One (1) THF Storage Tank | 16,500 gallons (Material stored is greater than 1.5 psia.) | 6/9/11 |

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

EMISSIONS INVENTORY

An emission update was received for the year 2010. The actual annual VOC emissions from the film plant were 61.3 tons, 6.3 tons of which were also HAPs (toluene).

EMISSION UNIT APPLICABLE REQUIREMENTS – Emission Units MYE01 to MYE27; MYT01 to MYT09

There are three sources of specific applicable requirements for the film coating operation: The 5/30/96 VOC RACT Consent Agreement, the 6/9/2011 NSR permit, and 40 CFR 63, Subpart JJJJ requirements. Because of the structure of the VOC RACT Consent Agreement and the NSR permit, except for where noted, the facility's specific applicable requirements apply to the film coating process as whole, as opposed to any specific unit within the operation. Subpart JJJJ requirements apply to the web coating lines only.

DuPont Teijin Films™ - Mylar® Plant is subject to Subpart JJJJ since they meet the applicability requirement stated in 40 CFR 63.3290 as being a major source of HAPs (toluene) at which web coating lines are operated. The facility meets the Subpart JJJJ definition of web coating, which states, "Web coating line means any number of working stations, of which one or more applies a continuous layer of coating material across the entire width or any portion of the width of a web substrate, and any associated curing/drying equipment between an unwind or feed station and a rewind or cutting station."

A. Limitations

1996 RACT Consent Agreement

- E.13. Film plant VOC emissions shall be controlled by carbon bed adsorbers*. The carbon adsorption system shall be equipped with a device which measures the VOC concentration of the exhaust gas and an exhaust gas flow meter. The instruments shall be calibrated as recommended by the manufacturer for the service in which they are installed. The carbon bed outlet VOC concentration shall not exceed 50 ppm before triggering a switch to a fresh bed.
- E.15. The VOC control efficiency of the film plant processes shall be a minimum of 98.3% on a six-month rolling average basis. This efficiency shall be verified by mass balance methods described or referenced in Condition E.3. of this Agreement.

2011 NSR Permit and "Emission Standards for Volatile Organic Compound (VOC) Storage and Transfer Operations (Rule 4-25)":

2. **Emission Controls** - Volatile organic compound (VOC) emissions from the THF storage tank shall be controlled by the use of a submerged fill pipe and a four-bed carbon adsorption recovery system. The carbon adsorption system shall achieve at least a 95% control efficiency for VOC emissions, calculated as a monthly average, from the THF storage tank as determined by a material balance calculation method similar to that specified in Condition 8a. The submerged fill pipe system* and the carbon adsorption system shall be provided with adequate access for inspection and shall be in operation when the THF storage tank is being filled.
(9 VAC 5-80-1180, 9 VAC 5-40-3430, 9 VAC 5-40-3440, and 9 VAC 5-50-260)

*: The above condition also incorporates the applicable requirement (control technology guidelines) from the “Emission Standards for Volatile Organic Compound (VOC) Storage and Transfer Operations (Rule 4-25)”. Rule 4-25’s emission standard for filling applies to each VOC stationary storage tank with a vapor pressure >1.5 PSIA, a storage capacity >2,000 gallons and located in a VOC control area of which the THF tank meets all three of these applicable requirements. The emission standard for filling requires the tank to be equipped with a control method that will remove, destroy or prevent the discharge into the atmosphere of at least 60% by weight of VOC emissions during the filling of the tank. This standard can be met by the use of a vapor control system such as a submerged fill pipe or any system of equal or greater control efficiency to the submerged fill pipe system provided the system is approved by the board. Monitoring is already in place as indicated in Condition III.B.1. and by the use of material balance to determine the effectiveness of the control technology along with the existing recordkeeping. The #3 secondary containment tank was included in this limitation as it is required to meet the control technology requirement under Rule 4-25 which incorporates this requirement. DuPont Teijin Films – Mylar Plant indicated this tank does not have a submerged fill pipe; however, the plant’s VOC emissions are required to be controlled by carbon bed adsorbers under condition E.13 of the 1996 RACT consent agreement of which the tank is controlled by.

3. **Emission Controls¹** - Volatile organic compound (VOC) emissions from the vertical tower “G” coater shall be controlled by a four-bed carbon adsorption recovery system. The four-bed carbon adsorption recovery system shall be provided with adequate access for inspection and shall be in operation when the vertical tower “G” coater is operating.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)
4. **Emission Controls²** - Volatile organic compound (VOC) emissions from the multi-station coater shall be controlled by a four-bed carbon adsorption recovery system. The four-bed carbon adsorption recovery system shall be provided with adequate access for inspection and shall be in operation when the multi-station coater is operating.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

^{1 & 2}: When the RACT is next amended it is recommended that the wording be changed to be reflective of the carbon bed adsorption recovery systems are an inherent part of the process and are still limited by the process limitations.

5. **Monitoring Devices** - Each of the carbon adsorption systems shall be equipped with a device which continuously measures the VOC concentration of the exhaust gas and which triggers the carbon bed regeneration cycle. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer’s written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the respective carbon adsorption system is operating.
(9 VAC 5-80-1180 D, 9 VAC 5-50-20 C and 9 VAC 5-50-260)
6. **Production** - The production of coated Mylar® film shall not exceed 28,290 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180)

7. **Emission Limits** - Emissions from the operation of the Mylar® film coating plant shall not exceed the limits specified below:

| | | |
|----------------------------|-------------|---------------|
| Volatile Organic Compounds | 36.5 lbs/hr | 159.3 tons/yr |
|----------------------------|-------------|---------------|

Compliance with these emission limits shall be demonstrated by record keeping in accordance with Condition 8 (b and d).
(9 VAC 5-50-260)

MACT, Subpart JJJJ

| | |
|-------------------------------|--|
| 40 CFR 63 Subparts A and JJJJ | The web coating lines (MYE20-24) shall be operated in accordance with 40 CFR 63 Subparts A and JJJJ. |
|-------------------------------|--|

| | |
|---------------|--|
| 63.3320(b)(1) | Organic HAP emissions from the web coating lines (MYE20-24) shall not exceed 5 percent of the organic HAP applied for each month (95 percent reduction). |
|---------------|--|

B. Monitoring

In the prior Title V renewal, it was determined that the facility does not meet all of the three requirements to be subject to Compliance Assurance Monitoring (CAM), a CAM Plan was/still is not needed along with it being exempt under 40 CFR 64.2(b)(1)(i) as it is subject to a post November 15, 1990 NESHAP of MACT JJJJ (Paper and Other Web Coating). This determination still applies as the Mylar® plant has not been modified since the last Title V renewal. The following is as discussed in the prior Title V renewal Statement of Basis (SOB):

The carbon adsorption beds and associated recovery system within DuPont Teijin Films™ are not “control devices” but are considered “inherent process equipment” (or “recovery equipment”). Inherent process equipment is defined in 40 CFR 64.1 as, “Equipment that is necessary for the proper or safe functioning of the process, or material recovery equipment that the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulations. For the purposes of this part, inherent process equipment is not considered a control device.” To see whether the facility’s carbon adsorption beds and associated recovery system were indeed inherent process equipment, specific questions were asked to the facility. These questions came from the Title V Manual, Appendix X – CAM, Attachment B, *Control device or Inherent process equipment determination - Recovery equipment*. The main question is stated below:

1. What is the value of the material recovered annually compared to the annualized cost of the control equipment (purchase, maintenance, and operation)?

DuPont – The value of the material recovered annually = \$18,500,000

The annualized cost of the control equipment is as follows:

- Annualized Depreciation = \$500,000
- Fixed Costs (Operator/Supervisor/Mechanics pay/Benefits and overtime) = \$600,000
- Variable Costs (steam, nitrogen, electric, air, operating replacement parts, carbon, etc.) = \$321,000
- **TOTAL = \$1,421,000 < \$18,500,000**

****If the value of the material recovered annually is more than the annualized cost of the equipment, the equipment is not control equipment. This stops all other questions.**

After this first question, it was noted that the equipment is inherent process equipment and is not control devices. (see letter dated May 17, 2006 from Wayne Hewitt)

MACT, Subpart JJJJ

- 63.3340 The permittee shall develop and implement a written start-up, shutdown, and malfunction (SSM) plan as specified in 40 CFR 63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the affected source during periods of SSM and a program for corrective action for malfunctioning process, air pollution control equipment, and monitoring equipment used to comply with 40 CFR 63, Subpart JJJJ.
- 63.3350 (d)(2) For the web coating lines (MYE20-24), the permittee must install, calibrate, maintain, and operate according to the manufacturer's specifications a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device must be certified by the manufacturer to be accurate to within +/-2.0 percent by mass.
- 63.3370(i)(1)) For the web coating lines (MYE20-24), the permittee shall demonstrate compliance with the emission standard in Condition III.A.6 through a liquid-liquid material balance. The liquid-liquid material balance shall be performed monthly as stated in 40 CFR 63.3370(i)(1) and specified below:
- Determine the mass of each coating material applied on the web coating line or group of web coating lines controlled by a common solvent recovery device during the month.
 - Determine the volatile organic content of each coating material as-applied during the month following the procedure in §63.3360(d).
 - Determine and monitor the amount of volatile organic matter recovered for the month according to the procedures in §63.3350(d).
 - Calculate the volatile organic matter collection and recovery efficiency using the following equation:

$$R_v = \frac{M_{vr} + M_{vret}}{\sum_{i=1}^p C_{vi} M_i + \sum_{i=1}^q C_{vij} \times M_{ij}} \times 100$$

Where:

R_v = Organic volatile matter collection and recovery efficiency, percent.

M_{vr} = Mass of volatile matter recovered in a month, kg.

Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term

- M_{vert} = will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in §63.3370.
- p = Number of different coating materials applied in a month.
- C_{vi} = Volatile organic content of coating material, i , expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i , applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{vij} = Volatile organic content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j , added to as-purchased coating material, i , in a month, kg.

C. Recordkeeping

1996 RACT Consent Agreement

- E.14. DuPont shall maintain records of the manufacturer's recommendations for carbon bed replacement and records of actual carbon bed replacement.

2011 NSR Permit

8. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:
- Monthly VOC emissions (tons) from the film coating plant, calculated by a material balance similar to the method prescribed in 40 CFR §60.603 and approved by the Director, Piedmont Region. The material balance shall include terms for monthly beginning and ending VOC inventory and amounts of VOC removed from the system as nongaseous losses.
 - Annual VOC emissions (tons per year) from the film coating plant, calculated monthly as the sum of monthly VOC emissions over the previous consecutive 12 months.
 - The number of hours during the calendar month that the film coating plant was operating. The number of hours that the film coating plant is operating during the calendar month shall be determined as the sum of plant operating hours in which any film coater within the plant was operated.
 - Average hourly VOC emissions from the film coating plant, calculated monthly by dividing the annual VOC emissions over the previous consecutive 12 months by the sum of the number of hours that the film coating plant was operating during the previous consecutive 12 months.

- e. The monthly production of coated film, and the annual production of coated film calculated monthly as the sum of coated film production over the previous consecutive 12 months.
- f. Maintenance and calibration records (calibrations, checks, and adjustments) for the VOC emission monitoring device.
- g. Records of the manufacturer's recommendations for carbon bed replacement, and records of actual carbon bed replacement.
- h. Training records required by this permit.

These records shall be available for inspection by the DEQ and shall be current for the most recent two years.

(9 VAC 5-80-1180 and 9 VAC 5-50-50)

MACT, Subpart JJJJ

- 63.3410(b) The permittee shall maintain monthly records of all liquid-liquid material balances performed in accordance with the requirements of Condition III.B.3. The records must be maintained in accordance with the requirements of §63.10(b).

D. Testing

1996 RACT Consent Agreement

- E.3. All solvent-spun synthetic fiber processes at each plant shall demonstrate compliance with the VOC control efficiencies as specified in the Agreement by a monthly material balance averaged with the preceding five months. The VOC control efficiencies shall be calculated each month from the VOC emissions determined in the Performance Test and Compliance Provisions section of 40 CFR 60, Subpart HHH (Standards of Performance for Synthetic Fiber Production Facilities 60.600-60.604). The VOC control efficiencies shall be calculated using the following equation:

$$EFF = \left[1 - \left(\frac{E}{1000} \right) \right] \times 100$$

Where:

EFF = VOC control efficiency.

E = Emissions in pounds per 1,000 pounds of solvent feed.

2011 NSR Permit

11. **Performance Tests** - The permittee shall conduct monthly performance tests by material balance for VOC emissions from the film coating plant to demonstrate compliance with the emission limits contained in this permit. Compliance with the annual VOC emission limit shall be determined monthly from records required by Condition 8b. Compliance with the hourly VOC limits shall be determined monthly from records required by Condition 8d.
(9 VAC 5-50-30 G)

E. Reporting

1996 RACT Consent Agreement

- E.4. DuPont shall submit a written report to the Regional Director of the results of the first 6-month average VOC control efficiency demonstration. DuPont shall also submit the results of the subsequent demonstrations in which the 6-month average VOC control efficiency in any plant as specified in this Agreement is not demonstrated. These reports shall be submitted at the end of each calendar quarter after the initial demonstration, however, if DuPont is successful in demonstrating compliance with the VOC control efficiency in each plant during a particular quarter, a report stating this shall be submitted to the Regional Director semiannually.

2011 NSR Permit

12. **Compliance Reports** - The permittee shall submit a written report to the Piedmont Region of the results of continuing compliance determinations that indicate that VOC emissions exceed the emission limits in Condition 7. These reports shall be submitted quarterly at three-month intervals. If no exceedances occur during a particular quarter, a report stating this shall be submitted semiannually.
(9 VAC 5-50-360)

MACT, Subpart JJJJ

- 63.3400(c) The permittee shall submit a semiannual compliance report according to 40 CFR 63.3400(c)(1) and (2) to the Director, Piedmont Region. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 and must be postmarked or delivered no later than July 31. This report shall include:
- a. Company name and address.
 - b. Statement by a responsible official with that official's name, title, and signature certifying the accuracy of the content of the report.
 - c. Date of report and beginning and ending dates of the reporting period.
 - d. If there are no deviations from any emission limitations (emission limit or operating limit) that apply to you, a statement that there were no deviations from the emission limitations during the reporting period, and that no CMS was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.
 - e. For each deviation from an emission limitation (emission limit or operating limit) that applies to you, the compliance report must contain:
 - i. The total operating time of each affected source during the reporting period.
 - ii. Information of the number, duration, and cause of deviations (including unknown cause), if applicable, and the corrective action taken.

F. Streamlined Requirements

The following conditions in the 2011 NSR permit have not been included for the reasons provided:

Condition 13 of the 2011 permit is not being included as an applicable requirement in the Title V permit because it is included in Condition Q in the General Permit Condition Section of the Title V permit. The Part 70 regulations define specific inspection and entry requirements consistent with the issuance of a Title V permit. These requirements are described in Condition Q in the General Permit Condition Section of the Title V permit and are at least as stringent as the NSR requirements. Inclusion of this condition would be redundant and the requirements have been overtaken by the Title V (Part 70) regulations.

Condition 16 of the 2011 permit is not being included as an applicable requirement in the Title V permit because it is included in the Condition F in the General Permit Condition Section of the Title V permit and is included as part of the malfunction reporting requirements for the overall permit. Including this condition a separate enforceable condition on the permitted equipment in addition to the entire listing of equipment covered by the Title V permit creates a situation where conditions are both redundant and confusing.

Condition 12 from the 2011 permit is being left out of the Title V permit because the condition defines the causes for suspension or revocation of an NSR permit which can be considered extraneous to the Title V permit. The assumption underlying this determination is that if an NSR permit is revoked or amended through unsolicited action by DEQ, the Title V permit will be changed in a separate and independent action from the NSR change. The Title V permit will change to reflect the changes in applicable requirements brought about by the NSR change.

Condition 18 of the 2011 permit is not being included as an applicable requirement in the Title V permit because it is redundant. Condition T in the General Permit Condition Section of the Title V permit describes the requirements for transfer of ownership relative to the Title V permit. The transfer of ownership requirements for the NSR permit are therefore inappropriate for inclusion in the Title V permit.

In a similar manner, conditions 1, 17, and 19 of the 2011 permit all contain general requirements relative to the New Source Review program which are inapplicable or redundant to the Title V permitting program. Furthermore, condition 9 of the 2011 permit is made redundant by the "Testing" condition of the "Generally Applicable Standard Requirements" section of the Title V permit. These conditions will therefore not be included in the Title V permit.

G. Generally Applicable Standard Requirements

1. **New and Modified Source Opacity Standard** - Unless specified otherwise in this part, on or after the date on which the performance test required to be conducted by 9 VAC 5-50-30 is completed, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity. Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section.

(9 VAC 5-50-80)

There are no sources which are applicable to the above standard. Therefore this standard was not included in the Title V permit.

2. **Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 and 9 VAC 5-80-110)

Additionally, certain conditions within existing NSR permits may be applicable to all newly constructed or modified equipment that receive a permit. Below is a listing of these conditions from the 2011 NSR permit:

3. **Maintenance/Operating Procedures** - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Maintain an inventory of spare parts
 - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided, including the names of trainees, the date of training, and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-50-20 E)

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 2-09".

This general condition cites the Articles that follow:

Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources

This general condition cites the sections that follow:

9 VAC 5-80-80. Application
9 VAC 5-80-140. Permit Shield
9 VAC 5-80-150. Action on Permit Applications

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

This general condition cites the sections that follow:

9 VAC 5-40-41. Emissions Monitoring Procedures for Existing Sources
9 VAC 5-40-50. Notification, Records and Reporting
9 VAC 5-50-50. Notification, Records and Reporting

This general condition contains a citation from the Code of Federal Regulations as follows:
40 CFR 60.13 (h). Monitoring Requirements.

J. Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources
9 VAC 5-80-190. Changes to Permits.
9 VAC 5-80-260. Enforcement.
9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources
9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas
9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction
9 VAC 5-80-110. Permit Content

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions have Virginia Administrative Codes which have specific requirements only enforceable by the State and have been identified as applicable by the applicant.

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20. **Emission Limits** - Emissions from the operation of the Mylar® film coating plant shall not exceed the limits specified below:

| | |
|---------|-------------|
| Toluene | 12.5 lbs/hr |
|---------|-------------|

Compliance with this emission limit shall be demonstrated by record keeping in accordance with Condition 21c.

(9 VAC 5-80-1180, 9 VAC 5-50-260 and 9 VAC 5-60-320)

21. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:

- The number of hours during the calendar month that the Mylar® film coating plant was operating. The number of hours that the Mylar® film coating plant is operating during the calendar month shall be determined as the sum of plant operating hours in which any Mylar® film coater within the plant was operated.
- Monthly Toluene emissions from the Mylar® film coating plant, calculated by a material balance similar to the method prescribed in 40 CFR §60.603 and approved by the Piedmont Region. The material balance shall include terms for monthly beginning and ending Toluene inventory and amounts of Toluene removed from the system as nongaseous losses.
- Average hourly Toluene emissions, calculated monthly by dividing the sum of monthly Toluene emissions over the previous consecutive 12 months by the sum of the number of hours that the Mylar® film coating plant was operating during the previous consecutive 12 months.

These records shall be available for inspection by the DEQ and shall be current for the most recent two years.

(9 VAC 5-80-1180 and 9 VAC 5-50-50)

15. **Performance Tests** - The permittee shall conduct monthly performance tests by material balance for Toluene emissions from the Mylar® coating plant to demonstrate compliance with the emission limits contained in this permit. Compliance with the hourly Toluene limits shall be determined monthly from records required by Condition 21c.

(9 VAC 5-80-1200 and 9 VAC 5-50-30 G)

16. **Compliance Reports** - The permittee shall submit a written report to the Piedmont Region of the results of continuing compliance determinations that indicate that Toluene emissions exceed the emission limits in Condition 20. These reports shall be submitted quarterly at three-month intervals. If no exceedances occur during a particular quarter, a report stating this shall be submitted semiannually.
(9 VAC 5-80-1180 and 9 VAC 5-50-360)

FUTURE APPLICABLE REQUIREMENTS

No Future Applicable Requirements have been identified for this facility.

INAPPLICABLE REQUIREMENTS

NSPS Subpart VVV (which sets performance standards for the polymeric coating of substrates) is not applicable to this facility since the NSPS specifically exempts facilities which coat plastics, such as this one. In addition, there are no applicable GHG permitting requirements.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

| Emission Unit No. | Emission Unit Description | Citation ¹ (9 VAC__) | Pollutant Emitted (5-80-720 B.) | Rated Capacity (5-80-720 C.) |
|-------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------------|
| MYE-28 | Aqueous-based metal cleaning units | 5-80-720 A.38. | NA | NA |

¹The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable to public review.

PUBLIC PARTICIPATION

The proposed permit was public noticed in the Style Weekly on July 13, 2011. The public comment period was from July 14, 2011 to close of day on August 12, 2011. The EPA review was from July 14, 2011 to close of day on August 27, 2011.